

Serial No. 09/883,342
Reply to Office Action of April 28, 2004
Reply dated July 27, 2004

Docket No. K-0075A

Amendments to the Specification:

Please replace the second full paragraph on page 2 with the following amended paragraph:

a1 For frame transmission power control, the base station ~~measure~~ measures the transmission power of the frame transmitted from the mobile station and ~~send~~ sends a power control command to the mobile station according to the measured result. The power control command instructs the mobile station to adjust the transmission power. This power control command is composed of a transmission power increment bit or a transmission power decrement bit for maintenance of an average reception power.

Please replace the third full paragraph on page 3 with the following amended paragraph:

a2 Thus, the mobile station adjusts the transmission power in response to the sent power control command and ~~transmit~~ transmits a signal at the adjusted transmission power.

Please replace the fifth and sixth full paragraphs on page 3 with the following amended paragraph:

a3 As discussed above, the conventional power control of the CDMA mobile communication system is mainly a reverse link control.

But, for a high-speed forward link power control, a mobile station is required ~~for~~ measuring to measure the power of a CDMA signal received from a base station and

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a³ determining which one of the CDMA channels is to be observed and used for the power control.

✓
Please replace the second full paragraph on page 7 with the following amended paragraph:

a⁴ Other objects, characteristic features and advantages of the present invention will now become apparent with a detailed description of an embodiment made with reference to the accompanying ~~drawings~~ drawing, in which:

✓
Please replace the fourth paragraph which bridges pages 7 and 8 with the following amended paragraph:

a⁵ The following is a detailed description of a preferred embodiment of a method and apparatus for determining frame quality in a mobile communication system according to the present invention made with reference to the accompanying ~~drawings~~ drawing.

✓
Please replace the second full paragraph on page 12 with the following amended paragraph:

all Using the equation (1), a signal to ~~noise power~~ interference ratio E_b/N_t for the currently received traffic channel is obtained as follows.

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✓
Please replace the third full paragraph on page 12 with the following amended paragraph:

Q7 The signal to ~~noise power~~ interference ratio E_b/N_t for the currently received traffic channel as obtained by the equation (2) represents a received SIR. The received SIR is compared with a reference SIR to obtain corresponding frame quality.

✓
Please replace the first full paragraph on page 14 with the following amended paragraph:

a8 Consequently, the SIR estimating unit 170 estimates a signal to ~~noise power~~ interference ratio E_b/N_t (received SIR) for the currently received traffic channel by applying the outputs of the PCB extracting unit 150 and the pilot filter 140 to the equations (1) and (2).

✓
Please replace the first full paragraph on page 16 with the following amended paragraph:

a9 When frame quality cannot be measured by the CRC in the communication system that provides high rate packet data services, i.e., when the PCBs for maintaining a call are only transmitted under the control hold state in which no data transmission actually occurs, frame quality can be determined by estimating the signal to ~~noise power~~ interference ratio E_b/N_t (received SIR) for the current traffic channel. This facilitates outer loop power control for high rate power control, low rate power control, and channel state monitoring.